

SUSHMA DEEGOJU

 sushmadeegoju16@gmail.com |  [sushma-deegoju-vt/](https://www.linkedin.com/in/sushma-deegoju-vt/) |  +1(540) 998-4213 |  [Sushmadeegoju](https://github.com/Sushmadeegoju) | [my-portfolio](#)

OBJECTIVE

Passionate graduate student with 2 years of industry experience as a software engineer at Samsung and a good understanding of software development life cycles looking for full-time opportunities to leverage my technical and problem-solving skills in a company that promotes work-life balance.

SKILLS SUMMARY

Programming languages : C++, C, JavaScript, Go, Python
Web Technologies : HTML, CSS, React.js, Redux, Vue.js, Node.js, Express.js, Rest API, Figma, Material-UI
Databases : MySQL, PostgreSQL, MongoDB
Others : JIRA, Gtest, SonarQube, Jenkins, Linux (proficient in Bash shell), GDB, Postman, GIT, Docker, GitLab, Visual Studio, Android Studio, IntelliJ, Perforce, Swarm, Wireshark

EDUCATION

- **Virginia Tech** Blacksburg, VA
Master's in Computer Science Aug 2022 - May 2024
- **National Institute of Technology, Delhi** Delhi, India
Bachelor's in Computer Science Aug 2016 - Jun 2020

EXPERIENCE

- IT Security lab, Virginia Tech** Blacksburg, VA
Web Developer Feb 2023 - present
- Developed a **React.js**, **Golang**, and **PostgreSQL**-powered **Key Metrics** app, enabling 25% faster data visualization and real-time monitoring.
 - Built a scalable and user-friendly VT Minimum Security Standards website using **React**, **Go**, and **PostgreSQL**, leading to a 30% rise in website traffic within the first quarter.
 - Developed an efficient **Hugo**-powered website for IT Security Lab, achieving 50% faster page load times and improved user experience.
 - Actively involved in project planning, development, and deployment within the IT Security Lab, utilizing GitLab and Slack for seamless collaboration and communication.
 - **Tech Stack:** React.js, Material-UI, Golang, PostgreSQL, Postman, GitLab, Slack

- Samsung R&D Institute** Bangalore, India
Senior Software Engineer Mar 2022 - Aug 2022
- Integrated a new feature into the existing QUIC protocol implementation using **C++** to parse multiple crypto frames in a single TCP packet. This resulted in a **50%** improvement in detecting QUIC-utilizing applications.
 - Conducted thorough integration testing on **Linux-based** servers, identifying and resolving issues promptly for seamless system performance.
 - Developed a Multi-layered traffic classification model using Neural Networks and achieved the accuracy of **97%**.
 - Led a project mentoring an intern in integrating Machine Learning frameworks into DPI for real-time algorithm performance testing.
 - **Tech Stack:** C++, Bash, Python, Gtest, SonarQube, Jenkins, GDB, Wireshark, Perforce, Swarm, JIRA

- Samsung R&D Institute** Bangalore, India
Software Engineer Jan 2021 - Feb 2022
- Optimized the performance of Deep Packet Inspection (DPI) Engine by sending less number of bytes for detection. Implemented the code in **C++** and received the **Spot Award** for improving the operation time by **100%**.
 - Automated the regression testing environment using **Python** scripts, improving operational efficiency by **83%** and test execution speed.
 - Used **GDB** for precise code debugging, employing breakpoints, watchpoints, and stack analysis ensuring efficient issue resolution.
 - Improved the robustness of DPI solution by writing unit test cases using **Gtest** framework to increase the code coverage from **40%** to **90%**.
 - Used **SonarQube** and **Jenkins** to ensure code sanity by integration testing and continuous code quality monitoring.
 - **Tech Stack:** C++, Bash, Python, Gtest, SonarQube, Jenkins, GDB, Wireshark, Perforce, Swarm, JIRA

PROJECTS

- Key Metrics** IT Security Lab, Virginia Tech
- Developed the **Key-Metrics** application, designed to aggregate and visualize real-time data from diverse platforms using ServiceNow APIs.
 - Developed interactive bar charts using **Material-UI**, enabling intuitive data exploration and visualization, leading to a 25% increase in incident prediction accuracy.
 - Improved data accessibility for IT security analysts, leading to 38% reduction in incident response time.
 - Reduced data retrieval time by 40% through optimized API integration and efficient back-end processing, improving analyst workflow.
 - **Tech Stack:** React.js, Material-UI, Golang, PostgreSQL, Postman, GitLab, Slack
- VT Minimum Security Standards** IT Security Lab, Virginia Tech
- Developed a high-availability VT Security Standards website using **React**, **Golang**, and **PostgreSQL**, capable of handling 5,000 concurrent users with minimal latency.
 - Leveraged React's virtual DOM for efficient rendering and PostgreSQL's indexing and query optimization for swift data processing.
 - Implemented caching strategies for frequently accessed data, further enhancing site performance and reducing server load by 25%.
 - Increased site traffic by 30% after launch, demonstrating strong user adoption and website's effectiveness in providing vital information.
 - **Tech Stack:** React.js, Material-UI, Golang, PostgreSQL, Postman, GitLab, Slack
- EasyHire** (<https://github.com/Sushmadeegoju/EasyHire-CareerFairPlatform>) Virginia Tech
- Implemented a dynamic career fair platform, using **React.js** for the front-end, **Node.js** for the back-end, and **MongoDB** as the database.
 - Engineered a scalable and responsive platform, integrating authentication systems using **Redux**, real-time updates, and interactive user interfaces to optimize jobseeker-recruiter interactions.
 - Incorporated Node Mailer API within Express framework to send email notifications, enhancing the project's functionality.
 - **Tech Stack:** React.js, Redux, Node.js, MongoDB, Express.js, JIRA, Git

CERTIFICATIONS AND AWARDS

- Spot Award for the best performance in the month of October 2020 - Samsung R&D Institute, Bangalore.
- Second Runner-up at the American Express Makeathon-2019.